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BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
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1711

NOTIFICATION DATE	DELIVERY MODE
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06/08/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/560,182	Applicant(s) SCHULZE, INGO	
	Examiner Joseph L. Perrin	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-42 is/are pending in the application.
- 4a) Of the above claim(s) 15-24 and 29-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 25-28 and 35-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 19 April 2011 have been fully considered but they are not fully persuasive.
2. Regarding the Restriction Requirement of 15 December 2010, Examiner notes that the restriction requirement was made **FINAL** in the Office Action of 28 January 2011. Examiner thoroughly considered Applicant's single argument of a generic allegation of "no serious burden" without any showing for supporting such allegation, thus, this argument was found to be unconvincing. Hence, Applicant's traversal was noted and the Restriction made **FINAL** because Applicant simply opined that there was "no serious burden" for Examiner to search all claims, which include method claims and apparatus claims (classified in separate classes 8 and 68, respectively, as indicated in the U.S. Patent Publication for the current application), without any showing or evidence to support such allegation. Notwithstanding this, Applicant's continuing arguments for alleged no serious burden and an alleged lack of showing of separate classification are unconvincing first and foremost because the current case is a National Stage application under PCT and not a standard U.S. application. Thus, the issue of classification search and serious burden are not relevant with respect to unity of invention required under PCT Rules. Accordingly, since Examiner has properly showed a lack of unity in accordance with PCT Rules 13.1-13.2 in the Restriction Requirement, and Applicant has not provided any arguments showing any deficiencies in Examiner's

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holding of lack of unity, the rejection is still deemed proper and maintained for at least those reasons clearly indicated in the Restriction Requirement of 15 December 2010.

3. Examiner notes that even if the Restriction Requirement was based on a standard U.S. application (which it is not) the clear and unambiguous classification separation between the method (class 8) and apparatus (class 68), and the fact that searching either the method and associated steps or the apparatus and associated structure is not required for the other, a *prima facie* case of obvious is readily apparent and would be in compliance with a Restriction Requirement under U.S. practice.

4. Examiner finds that Applicant's traversal has been fully considered and is unconvincing for at least the foregoing reasons and those already of record.

Accordingly, the requirement is still deemed proper and is therefore clearly made

FINAL. This application contains claims 15-24 and 29-34 drawn to an invention nonelected with traverse in the reply filed on 20 December 2010. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

5. Regarding the rejection under 35 U.S.C. § 112, second paragraph, Applicant's amendment has rendered this rejection moot. However, the amendment has resulted in addition rejections under § 112 as indicated below.

6. Regarding the rejections under 35 U.S.C. §§ 102/103, Applicant points to claim 25 and argues that "the Ortega reference does not disclose a speed control device that generates control signals for the drive motor such that the drive motor drives the laundry drum at the claimed speeds." This is unconvincing because claim 25 does not recite

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structural language commensurate in scope with Applicant's argument. Examiner notes that the apparatus is claimed and not a method of using the apparatus, regardless of whether or not the steps from the nonelected method are brought into the apparatus claims. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function (*In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959)) and "apparatus claims cover what a device *is*, not what a device *does*" (*Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)).

7. Claim 25 recites a "drive motor" and further describes the drive motor with respect to the intended use of intermittently driving the laundry drum which also recites specified drum speed ranges (i.e. "claimed speeds") in an intended use manner. The claim further recites a speed control device that drives the motor "at respectively different speeds". Thus, the recitation of the intended use of the drive motor at particular speed ranges and the separately recited speed control device rotating the drum at "different speeds" provides no indication that said speeds are the same. Simply stated, there is nothing that links the recited speed ranges to the speed control device but only a speed range as the intended use operation of a drive motor, nor are the recited speed ranges positively recited in a structural limiting manner. Examiner notes, however, that ranges and the optimization thereof are generally considered *prima facie* obvious and the burden is on Applicant to provide an adequate showing of nonobviousness in order to consider such ranges as a patentable modification (see MPEP § 2144.05).

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8. Accordingly, Applicant's arguments are unconvincing because they are not commensurate in scope with the invention as claimed since the claims do not recite the drum speeds in terms of a structural limitation/configuration and fail to adequately combine the recited ranges in the speed control device as purported by Applicant. Moreover, they merely present general allegations of patentability (i.e. a general statement of an "improvement" over the art when optimization of a range is predictably an improvement) and are insufficient to overcome a *prima facie* case of obviousness. Comparison evidence showing an unexpected or unpredictable improved result rather than general statements of an "improvement" are more decisive in showing patentably distinguishing improvements with respect to drum speed ranges in the instant case because various drum speeds including intermittently driven drum operations are replete throughout the washing machine art and one skilled in the art readily knows the effects of operating a drum washing operation at various predetermined drum speeds.
9. Claims 26-28 are argued to rely on reasons of same for claim 25 regarding patentability, which is unconvincing because claim 25 is not deemed to be in condition for allowance at this time.
10. Regarding new claims 35-42, since these claims are not yet under a rejection no further comment is deemed necessary. Any forthcoming rejections will adequately address these claims.

Specification

11. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Antecedent basis of the drum speeds in m/s since the specification is silent with respect to the claimed drum speeds in m/s and only refers to the drum speeds in l/min. Applicant is urged to consider defining the claims by the conventional unit of measure for drum speed (i.e. revolutions per minute) rather than the unconventional measure in meters per second which is wholly dependent on the drum size/circumference.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 41-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 41, the recitation of means plus function language as "speed control means for..." is considered improper broadening of scope outside of the original disclosure as filed and constitutes new matter. The original disclosure as file is wholly silent with respect to "speed control means" and the

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structures readable thereon. Rather, the original disclosure as filed solely discloses a single structure of a speed control device for performing such function. Hence, the original disclosure as filed is silent with respect to any means plus function language or any other structure capable of performing such function in the newly introduced broadened manner.

Thus, the newly introduced and unsupported means plus function language is considered to be an improper broadening of scope that encompasses subject matter outside of the scope of the original disclosure in such a way that fails to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is analogous to Applicant disclosing only a single species then later during prosecution attempting to claim the entire genus when no support for any other species is disclosed, which is not permitted and constitutes new matter by improper broadening of scope.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25-28 and 35-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claims 25 and 41, the recitation of drum speeds in terms of "m/s" (i.e. meters per second) renders the claims indefinite because it's unclear what Applicant intends. The original specification refers to the drum speed in what appears to be in terms of conventional drum speed

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measurement (i.e. "l/min."); while unclear what parameter is represented by "l" as such parameter is undefined in the original disclosure, it is presumed that the parameter relates to revolutions of the drum, hence, the standard drum speed measurement in revolutions per minute). However, the claims recite a different drum speed in "m/s" (presumably meters per second but undefined in the original disclosure). The difference is significant because the function of the washing machine at such speeds is independent of drum circumference with respect to revolutions per minute but wholly dependent on drum size/circumference with respect to meters per second.

Thus, it is unclear if Applicant's drum speed as claimed (in "m/s") is the same as that described in the original specification (in "l/min") or another and different drum speed supported only by the claims of the original disclosure. Examiner further notes that the currently claimed drum speed in m/s is wholly dependent and narrower in scope than the specification drum speed in l/min.

Accordingly, clarification and correction of what is meant by the drum speed unit (i.e. clarification of l/min and m/s) as well as whether or not the comparison of m/s and l/min are related or are completely separate drum speeds with respect to the performed drum speed functions of the original disclosure as filed since one is independent of drum size and the other is wholly dependent on drum size. See also above regarding the specification objection for lack of antecedent basis.

Claim Rejections - 35 USC § 102/103

15. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

16. Claims 25-28, 35-36 and 40-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ortega (previously cited).

Regarding claim 25, Ortega discloses a washing machine comprising a rotary laundry drum 3 and a drive motor capable of intermittently driving the laundry drum during a washing and rinsing process in alternating directions of rotation. See washing machine structure of Figure 3, drum operations of Figures 1-2 and column 4, line 5 – column 5, line 16 describing the operation of the washing machine and driving the drum motor in the manner claimed. Particularly see the intermittently and alternating drive motor operation of Ortega:

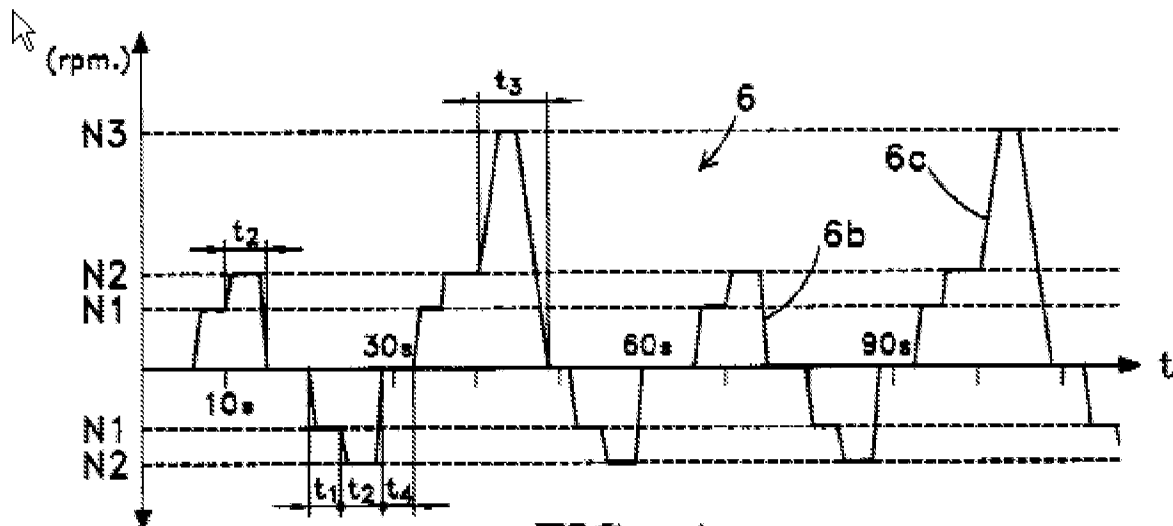


FIG. 1 of Ortega

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Regarding the speed control device of claim 25, Ortega recites a wash program which runs the intermittently driven and alternating directions of rotations at respectively different speeds as shown Figures 1-2 of Ortega, which read on a structure or “device” which controls the drive motor in the manner claimed (simply stated, the means for controlling speed clearly taught by Ortega reads on the claimed “speed control device”).

Regarding the majority of claim 25 with respect to the drive motor, Applicant recites significant intended use language of the operation of the drive motor during a washing and rinsing process without positively reciting structure further defining the drive motor. Thus, the intended use during operation of the washing machine is not afforded patentable weight and the apparatus disclosed by Ortega reads on the apparatus as claimed since, as shown above, the drive motor of Ortega is fully capable of performing the claimed drive motor operation including intermittently and alternately driving the laundry drum at the prescribed speeds. Examiner notes that the N3 speed of Ortega (exemplified at 300 or 400 rpm but not limited thereto) is higher than the intended use speed of 3.7 m/s, which clearly shows that the drum of Ortega is fully capable of rotating at such speed since such speed necessarily must be reached during the acceleration to the N3 speeds disclosed in Ortega. N1 (approximately 35 rpm) and N2 (approximately 55 rpm) in Ortega read on the claimed speeds of less than about 1.0 m/s and 1.1-1.6 m/s, respectively, assuming an approximate drum circumference of about 1 meter. Note that the claimed speeds in “m/s” are wholly dependent on drum size (i.e. circumference) and would not necessarily perform the same function in a

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washing machines since not all washing machines have the same drum circumference (see 112 issue above).

However, even if *arguendo* that one were to give the drive motor operation in the instant apparatus claim weight with respect to the apparatus as claimed, depending on how the disclosure of Ortega is interpreted Ortega still anticipates the washing machine as claimed. For instance, the drive motor of claim 25 recites:

a drive motor intermittently driving the laundry drum during the washing and rinsing process in alternating directions of rotation, the laundry drum being rotated in a first phase, in which the laundry drum is accelerated in one direction of rotation to a first rotational speed above an applicational rotational speed and in the other direction of rotation to a second rotational speed below the applicational rotational speed, wherein a circumferential speed of the laundry drum at the first rotational speed is approximately 3.7 m/s and the second rotational speed less than about 1.0 m/s (this reads on Fig. 1 of Ortega where N3 is a speed (all speeds between N2 and N3) above an applicational rotational speed and achieving a speed of 3.7 m/s during acceleration to N3 which is exemplified at 300 rpm, and N1 is a speed (35 rpm) in the other direction and below an applicational rotational speed of less than 1.0 m/s),

the laundry drum being rotated in a second phase within at least one of the washing and rinsing process, in which the laundry drum is accelerated in the second phase of high washing mechanics in both directions of rotation wherein

the circumferential speed of the laundry drum at a speed for high washing mechanics of the second phase lies in an interval of about 1.1-1.6 m/s (see first two rotations of N1/N2 of Ortega showing complimentary reversed rotations, as well as repeated rotations of N1/N2 starting at reference numeral 6b, wherein N2 is approximately 55 rpm)

and that the first and second phases take place successively at least once during at least one of the washing and rinsing process (as can be seen in Fig. 2 of Ortega, the described “phases” are successive with the “second phase” occurring before (first two rotations at N1/N2) and after (second pair of rotations of N1/N2 shown as “6b”) a “first phase” which includes rotational speed N3 and subsequent reverse rotation including N1),

and a speed control device for the drive motor of the laundry drum generating control signals for the drive motor such that the laundry drum is intermittently driven in alternating directions of rotation at respectively different speeds (as cited above, the washing program which drives the motor in accordance with Fig. 1 of Ortega reads on a speed control device as claimed).

Thus, the drum rotating operation of Ortega falls within the scope and is readable on the drum rotating operation in claim 25. Notwithstanding the significantly broader scope of the claims with respect to Applicant's Figure 1, note that Applicant's Figure 1 and Figure 1 of Ortega are similar in operation and rotational speeds. Accordingly, Ortega fully anticipates the apparatus of claim 25 regardless of whether or not the

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intended use operation of the drive motor is given patentable weight to the claimed apparatus.

However, notwithstanding the fact that Ortega discloses drum speeds which are believed to be overlapping with the newly claimed ranges, the unusual recitation of the claimed drum speed is in "m/s" rather than the standard "rpm". Note also that Ortega teaches that it is known to provide low and intermediate drum speeds in ranges of 30-40 rpm and 45-70 rpm, respectively (see col. 1, ll. 19-27). Hence, even if *arguendo* one were to construe the similar drum speeds as not overlapping or not anticipated they are clearly very similar and are dependent on the drum circumference (a drum circumference of .75 meters and 1.00 meters would have significantly different results in the claimed washing machine whereas the effects would be substantially the same in the washing machine of Ortega based on the unit of drum speed applied). However, drum speed of a washing machine is a result effective variable and optimizing the drum speed for a known and desired result such as tumbling, washing, drying, etc. is both predictable and expected, i.e. *prima facie* obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the drum speed to achieve a desired and known laundering action based on the drum speed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)).

Regarding claim 26, Ortega further discloses concerns for foam formation and imbalance and discloses that the control unit performs an imbalance test and cutting

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acceleration if an imbalance is detected (see col. 5, lines 40-45). The Examiner notes that detection of foam and imbalance/eccentricity in a washing machine is notoriously well known and is generally not considered a patentable modification.

Regarding claim 27, Ortega further discloses running normal wash programs “depending on the other factors affecting soaking” and varying the wash program operations (see col. 4, lines 40-53). Similarly, regarding new claims 35-36, the operation of the washing program (readable on a speed control device, see above) in Fig. 1 is believed to either anticipate the claimed ranges or render them obvious as indicated above for claim 25.

Regarding claim 28, Applicant claims a “device for establishing and evaluating at least one of the type and quantity of laundry items...”. This generic “device” recitation with the intended use of “establishing and evaluating at least one of the type and quantity of laundry items...” reads on a cycle selector wherein the user selects or establishes a cycle based on laundry type or quantity and the washing cycle is performed by the controller. Such structure is a standard feature in generally all domestic washing machines. Further, Ortega provides express teachings of normal wash programs and delicate wash programs, with the establishing of a desired wash program resulting in the operation of the program. Manifestly, in order for the washing machine of Ortega to perform either a normal or delicate type washing such device for selecting the wash cycle necessarily must exist in order for user to select a washing cycle based on type of laundry item. Thus, the position is taken that Ortega inherently

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or implicitly discloses a device which is fully capable of performing the intended use operation as claimed.

Regarding claim 40, Ortega further discloses the control unit performing an unbalance test and “cutting said acceleration out if an imbalance is *detected*” (emphasis added). Hence, Ortega implicitly or inherently discloses an imbalance detecting/sensing means readable on a “sensor” and varying the control signal to the drive motor (cutting acceleration) based on the received signal from the sensor, as claimed.

Regarding new claims 41-42, a broadened “speed control means” is claimed rather than a speed control device. Further, the “means” language includes rotating the drum at prescribed speeds. As indicated above, the washing program operating the drum in accordance with Fig. 1 of Ortega anticipates or at least renders obvious said ranges.

The Examiner notes that Applicant’s apparatus claims are replete with generic “device” language followed by the intended use operation of the device. However, it is fundamental that an apparatus claim defines the structure of the invention and not how the structure is used in a process, or what materials the structure houses in carrying out the process. *Ex parte Masham*, 2 USPQ2d 1647, 1648 (BPAI 1987). See also *In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705,706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235,238 (CCPA 1967). As long as the apparatus of Ortega is capable of performing the intended use operation claimed, the prior art apparatus meet the requirements of the claimed feature. Applicant has not established on this record any

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structural distinction between apparatus within the scope of the rejected claims and the apparatus fairly described by Ortega, and no such structural distinction is apparent.

Notwithstanding the washing machine of Ortega being fully capable of performing the claimed intended use, the washing machine of Ortega also discloses each and every step of the intended use operation as claimed. Accordingly, Ortega fully anticipates the apparatus as claimed. Applicant is urged to recite the instant invention in terms of structure as the apparatus has been elected rather than the method of using should Applicant wish to obtain a patent on the elected apparatus.

17. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ortega. Ortega, *supra*, discloses the claimed invention including the desire to wash a full load or half load of clothes (i.e. a determined/known load size; col. 3, ll. 18-20 & col. 5, ll. 17-20) and avoid excess foam formation (col. 2, ll. 46-48). However, Ortega does not expressly disclose the use of a load sensor or foam sensor and controlling the washing program based on sensed load or foam, respectively. The Examiner takes Official Notice that sensors are common knowledge in the art for such purpose, i.e. sensors for sensing load size and controlling a washing function based on the sensed load, as well as sensors for sensing formation of foam and controlling a washing function based on the sensed foam condition.

The position is taken that all of the component parts are known in Ortega and common knowledge in the washing machine art. The only difference is the combination

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of "old elements" into a single washing machine by providing the washing machine of Ortega with old and known sensors for sensing load size and foam.

Thus, it would have been obvious to one having ordinary skill in the art to mount known sensors for their known purpose into the washing machine of Ortega to achieve the predictable results of performing a washing operation based on a sensed load size and performing a washing operation based on a sensed foam condition.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
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JLP